## (19) World Intellectual Property Organization International Bureau





## (43) International Publication Date 1 June 2006 (01.06.2006)

# (10) International Publication Number WO 2006/057418 A1

(51) International Patent Classification:

(21) International Application Number:

PCT/JP2005/021931

(22) International Filing Date:

22 November 2005 (22.11.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2004-338443 24 November 2004 (24.11.2004) JP 2004-340235 25 November 2004 (25.11.2004) JP

- (71) Applicant (for all designated States except US): MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD. [JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka, 5718501 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): AKASHI, Hironari. TSUBOI, Kosuke.
- (74) Agents: IWAHASHI, Fumio et al.; c/o Matsushita Electric Industrial Co., Ltd., 1006, Oaza Kadoma, Kadoma-shi, Osaka 5718501 (JP).

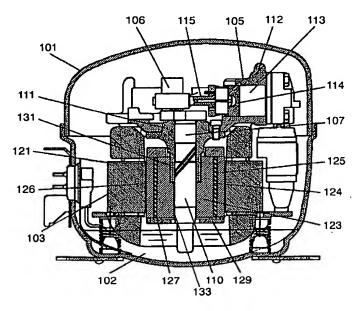
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### (54) Title: HERMETIC COMPRESSOR



(57) Abstract: A hermetic compressor has a bipolar permanent magnet motor where permanent magnet (124) is disposed in rotor core (123). Hollow bore (131) is disposed at the end on the compressing element (105) side of rotor core (123), and main bearing (111) extends into bore (131). The thickness of rotor core (123) is longer than that of stator core (126), thereby widening the magnetic path of rotor core (123). The magnetic flux amount generated in rotor core (123), which is conventionally insufficient due to existence of bore (131), increases, the loss decreases, and the efficiency increases.